

### **REMARKS**

Claims 1-19 are currently pending. All pending claims have been rejected. Applicant has amended claim 1, and presented new claims 20 and 21. No claims have been cancelled. No new matter is presented.

#### **Rejections under 35 U.S.C. §102**

Claims 1-19 have been rejected as being anticipated by US 5,265,115 by Amano.

This ground of rejection is respectfully traversed.

In one embodiment of the present invention, as set forth in claim 1, a diode pumped, intracavity doubled laser has at least two resonator mirrors that define a resonator cavity. An Nd:YVO<sub>4</sub> laser crystal and an LBO doubling crystal are positioned in the resonator cavity. A diode pump source supplies a pump beam to the laser crystal and produces a laser crystal beam. The laser crystal beam has at least one axial mode incident on the doubling crystal to produce a frequency doubled output beam with an output power of at least 1 watt with an optical efficiency of at least 23%. The diode pump source is configured to be coupled to a power supply.

U.S. Patent No. 5,265,115 (hereafter the "115 Patent") is directed to a laser system where the intensity of the output beam is substantially constant by controlling the intensity of the excitation laser beam, regardless of a variation of oscillation conditions. An Nd:YAG rod gain medium is mounted with a laser resonator on a thermal conductive support, together with an optical function element, and are accommodated in an adiabatic housing fixed on a heat sink. A thermal control block is brought into contact with both the thermal conductive support and the heat sink to radiate heat through the heat sink. The solid-state laser medium and a wavelength conversion element are kept at the predetermined temperature. A pump beam is produced by a diode source. A photo detector is provided with feedback control to control the intensity of the diode pump beam.

The '115 Patent does not teach, or suggest a frequency doubled output beam with an output power of at least 1 watt with an optical efficiency of at least 23%. Such an output beam is not inherent to the laser system of the '115 Patent.

### CONCLUSION

It is submitted that the present application is in form for allowance, and such action is respectfully requested.

The Commissioner is authorized to charge any additional fees which may be required, including petition fees and extension of time fees, to Deposit Account No. 08-1641 (Docket No. 18120-0231).

Respectfully submitted,

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